

# Mr. Connelly's Earth and Space Science 2022/23

## Mr. C's Central Themes

- Success is a choice. That path is longer or shorter for different people. You can and will choose to define success for yourself. You may hear me say this through the year “Whether you think you can or think you can't, you're right.”
- Humans are a social species, you didn't grow the food you ate for breakfast today, you probably didn't make the clothes you're wearing, you didn't mine the metal for your bike or car frame, someone else did. We don't live independent lives. One of the defining characteristics of our species is that in spite of our massive brain mass to body mass ratio, we are interdependent.

## What you can learn in this class:

- How to work in groups- defining roles, delegation, being an important piece of a whole finished product.
- How to take, study for, and succeed at tests- what techniques work, how much time to allot, ways to stretch and practice your knowledge and understanding.
- How to apply existing knowledge to a new situation.
- Presentation skills- identifying the main points, effective use of images.
- A manual for using and working with the nonliving parts of the planet you inhabit.
- Pattern identification.

If you want to succeed, you'll need to show up almost every day. Everyone misses school, but those days make success harder and require extra time. I don't have days in class where we don't do something that moves us towards our goals.

We build our own textbooks. I'll give you a binder for you to use to organize the pages as we build it. Many of the days in class involve textbook pages (worksheets) that you complete to earn points. Those points contribute to your grade. These are not completion grades; the questions require you to use the things you learn in class and experience in the labs. The tests are based on the labs we do and the textbook we build. You are welcome to use Google definitions for words, but the tests don't ask many definition questions and the definitions we use/build in class are the most useful on those tests.

Makeup of your grade:

~70% is Daily Work

~30% Tests

## Syllabus-

These are estimates. This is a student directed classroom, so the time we take to complete units will be adjusted based on our progress, incoming skills, etc.

September: Intro Unit- Working in groups, the metric system, basic graphing,  
Learning about our classmates.

October &

November: Astronomy- How the universe began, how stars change over time,  
The scale of the universe, How we got the mix of atoms that makes  
up the Earth.

December &

January: Weather and Atmosphere- How clouds form, Snowpack and its role  
in Montana, The Carbon Cycle

February &

March: Oceanography and Plate Tectonics- How the surface of Earth changes  
over time, What evidence we have for this theory, Why those two  
things are in the same unit.

April: Erosion and Weathering- How the forces that create mountains are  
thwarted, the behavior of Rivers, Glaciers and signs they were there.

May &

(gulp) June: Energy- How we can generate heat and electricity, what sources emit  
Carbon and which don't, Evaluation of our options to maintain a  
climate we are familiar with.